



HEXA-COVER®
SELECTED REFERENCES
WATER & INDUSTRY
PROVEN TECHNOLOGY SINCE 2004
MANUFACTURED IN EU, NORTH AMERICA AND AUSTRALIA

Certified for use with
potable water according
(AS/NZS 4020:2018)

Australia

Bairnsdale, VIC:	water storage
Bemm River, VIC:	2.000 m ² raw water
Brisbane, QLD:	1.100 m ² water reservoir
Brisbane QLD:	water storage
Fraser Island:	wastewater tank
Gayndah, QLD:	water storage
Gippsland, Vic:	water storage facility
Lake Clarendon, QLD:	1.600 m ² irrigation water
Laverton, VIC:	water storage
Laura, QLD:	water storage
QLD:	11.000 m ² water storage
Omeo, VIC:	4.300 m ² raw water
Townsville, QLD:	water storage
Yeppon, QLD:	water Storage Facility
WA:	2.300 m ² water reservoir

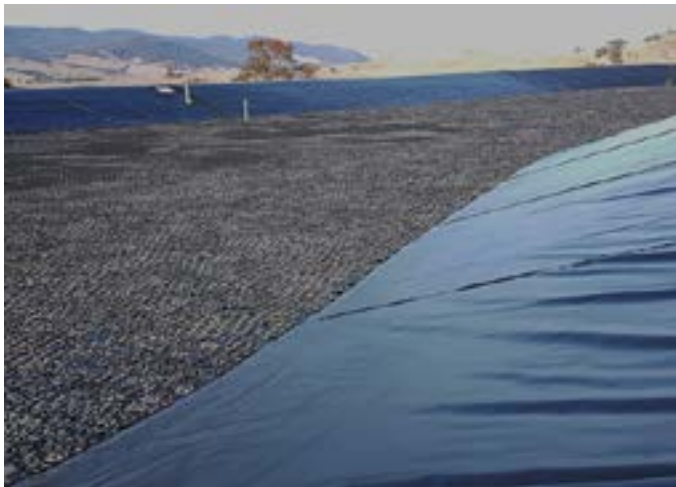
3998 Omeo, VIC: 4.300 m² raw water pond

Hexa-Cover® is installed for bird deterrent and for controlling growth of algae and evaporation

Water Corporation Western Australia, 6000 Perth
2.000 m² wastewater reservoir

“Water Corporation (WA) installed Hexa-Cover® in a wastewater treatment pond in Leonora, Gold-field Region.

We are happy to say, the installation went very smoothly. To date the effluent quality supplied to the recycled water scheme is much improved as well as the quantity”



Better Water and More of It

Jaymie Dawes at Omeo WTP Raw Water Storage Reservoir

The Omeo WTP raw water storage reservoir draws water from Butchers Creek which has had issues with algae growth in the past. Algae would be carried from the river into the lined reservoir above the plant. The algae make the water more difficult to treat to potable water standards.

Unwanted nutrients from ducks and wildlife accessing the reservoir also compounded the algae problem. As a result, the reservoir required regular emptying and cleaning, to mitigate the effects of algae on water quality and treatment.

Aiming to reduce reservoir maintenance and the intensity of treatment required, a thorough assessment of available reservoir covers was performed. Critical factors included capital cost, maintenance cost, and effectiveness in reducing UV penetration (thereby limiting growth of algae).

In this case significant evaporation reduction was seen as an added benefit rather than a critical factor.

Hexa-Cover® R114 tiles were determined as the preferred technology and were used to cover the raw water reservoir at Omeo WTP. Installation was achieved by pouring shipping containers of the tiles into the reservoir.

East Gippsland Water's Coordinator Environmental Services, Jaymie Dawes says the results of installing Hexa-Covers at Omeo have been positive.

"We installed 108,000 Hexa-Cover discs in June 2017, and since have seen a notable reduction in algae growth and E.coli in our raw water storage, which makes the water much easier to treat. We are now well into the third summer since installation and the reservoir has not needed to be emptied or cleaned."

The hexagonal tiles float freely on the water surface and arrange themselves in a grid that self-compensates for different reservoir shapes and varying water levels. The small size of the tile is an effective deterrent to waterfowl.

Up to 99% coverage of the surface area can be achieved, resulting in reduced evaporation, reduced contamination (from multiple sources) and improved water quality.

Even in situations where there are exposed surface areas as the tiles blow in the wind, water quality improvements appear unaffected.



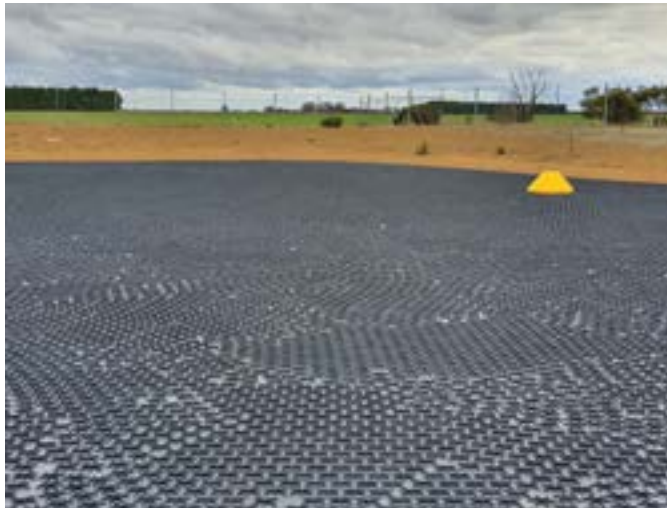
BETTER WATER AND MORE OF IT!

Hexa-Cover® at Omeo WTP (Raw Water Storage Reservoir) – The Results Are In!

In June 2017 East Gippsland Water installed Hexa-Cover® modular covers on the raw water reservoir at Omeo water treatment plant, with the aim of controlling algae which was sometimes carried in from the water source.

This was achieved with great success, making the water easier to treat and eliminating the regular emptying and cleaning of the reservoir which was previously required. More details of the installation can be found in the February 2020 edition of Operator.

To quantify the effect of the Hexa-Cover®, thorough testing of water from the reservoir continued and was compared with results from the 2 years prior to installation.



The effects are described and quantified by East Gippsland Water as follows:

Measured Parameter Effect:

Total Biovolume	95% Reduction
Potentially Toxic Biovolume	98% Reduction
E.coli	89% Reduction
Coliforms	Dramatic Reduction
Turbidity	57% Reduction
pH	Less variation
Water Temperature	Negligible Effect

The hexagonal tiles float freely on the water surface and arrange themselves in a grid that self-compensates for different reservoir shapes and varying water levels.

The small size of the tile is an effective deterrent to waterfowl (leading to reduction of E.coli). Up to 99% coverage of the surface area can be achieved, resulting in reduced evaporation, reduced contamination (from multiple sources), improved water quality and reduced operational & maintenance costs.

Belgium

BE-3300: sugar manufacturing - 2 x industrial wastewater basins 5.000 m² + 5.700 m²

BE-3511: water storage tank
 BE-8600: industrial wastewater
 BE-8700: industrial wastewater
 BE-8755: industrial wastewater
 BE-8800: water storage tank
 BE-8820: water storage tank
 BE-8830: water tank, irrigation
 BE-9070: water storage tank
 BE-9831: rainwater tank
 BE-9850: water storage tank

Brazil

Holambra, SP: 3.500 m² water reservoir (irrigation)
 Rio Grande du Sul: wastewater (petrochemical)
 Sao Paulo: industrial wastewater

Canada

BC: wastewater tank
 Cremona, AB: wastewater tank
 Markham, ON: wastewater tank
 Macoah, BC: 1.000 m² wastewater / WWTP
 Millbrook, ON: wastewater tank
 Saskatoon, City of, BC: 4.000 m² wastewater pond

Salluit, QC: gasoline tank
 Toronto, ON: 4.000 m² effluent lagoon
 Truro, NS: process water (dairy)

City of Nakusp, BC - 4.000 m² WWTP reservoir



"Familiar with the Hexa-Cover® Floating Cover, I felt the product could nicely cover the lagoon, controlling the algae growth as the sunlight would not be able to penetrate into the water. Additionally, the Hexa-Cover® Floating Cover would enable the aeration process and fluctuating water levels to continue"

Mike Pedersen, Director of Operations

Chile

Antofagasta: total of 26.000 m² water storage
 BioBio: 2.500 m² wastewater facility
 ConCon: 2.700 m² wastewater facility
 Iquique: total of 36.000 m² water storage ponds
 Iquique: 3.000 m² water storage facility
 Lomas Bayas: 6.400 m² tailings ponds
 Lomas Bayas: 15.000 m² tailings ponds
 Santiago: industrial wastewater (refinery)
 Santiago: 2.400 m² industrial wastewater
 Tarapacá, Chile: 5.000 m² ILS, PLS
 Tarapacá, Chile: 2.400 m² water storage facility



China

Beijing: 1.000 m² contaminated wastewater (petro)
Beijing: 1.100 m² industrial wastewater
Beijing: 6.400 m² industrial wastewater
Beijing: industrial wastewater (brewery)
Guangxi province: wastewater (chemicals)
Hebei: industrial wastewater
Shandong Province: industrial wastewater
Shanghai: industrial wastewater (dairy)
Tianjin: industrial wastewater
Tianjin: 1.000 m² ind. wastewater (chlor-alkali)
Tianjin: 3.300 m² wastewater (petrochemical)

Croatia

HR-31000: industrial wastewater

Czech Republic

CZ-471 29: industrial wastewater (Food & Bev)

Denmark

Holbæk Spildevand A/S

"We have Thermophilic digested biological sludge, digested at 55 degrees. This is done in the digester, from which the sludge is fed to a open storage tank. Subsequently the sludge is dewatered,

and the water from the dewatering is led to an "Anita Mox" process.

This process should preferably stay above 18° degrees, so it is important that the temperature does not drop too low in the storage tank.

To avoid this, we have installed Hexa-Cover® and by doing this we have reduced the heat loss in the storage tank.

The temperature of the Anita Mox® process is raised from 17.2° C to 19.7° C (measured from January to February 2013), despite temperatures down to -15° C"

Henrik Thygesen, Coordinator – Operations



Nordic Sugar A/S: 1.300 m² wastewater reservoir

"We chose Hexa-Cover® for covering our pool for several reasons.

First of all the Hexa-Cover® ensure an effective reduction of odors but also because the solution is simple and straightforward. The Hexa-Cover® is poured in, and automatically they create a coherent cover and automatically adapt to changes in the water level. The lifetime of 25 years was another factor. We are very pleased with the choice of Hexa-Cover®"

Ture Kliving, Environment Responsible



Sashimi Royal, DK-7730

"Since 2017 we have used Hexa-Cover® in our sea water tank in order to control growth of algae.

Our conclusion is very clear; Hexa-Cover® is a very effective tool to avoid growth of algae as the sun is blocked from affecting the water. Further, the Hexa-Cover® is very easy installed, it requires no maintenance, no service and no repair.

Prior to choosing Hexa-Cover® we also considered a tank-top but as we are located right at the seafront, we realized that we needed a long lived solution in no risk of being damaged by wind. We are very pleased about Hexa-Cover®."

Christian Bidstrup, Technician



Rockwool International A/S, DK-9500

2 x 1.250 m² water storage tanks

"We are now experiencing a significant difference. There is no clogging of filters because of algae and this means no stoppages at the plant, which again means huge savings in our operational costs.

Furthermore, the Hexa-Cover® Floating Cover solution is - compared to i.e. tents and tarpaulins as several industries are using to cover large containers - a much cheaper and easier solution.

In fact the Hexa-Cover® Floating Cover comes at around half the price of a traditional tent or tarpaulin and they are very easy to install and operate.

You simply add the Hexa-Cover® Floating Cover into the container, and they distribute themselves automatically making a cover that needs no inspection and/or servicing.

So, all in all, we are very satisfied with the Hexa-Cover® Floating Cover solution

Christian Jensen, Process Manager



Ecuador

New Quito International Airport: bird deterrent, evaporation and algae

Estonia

EST-44106, Kunda: process water

Finland

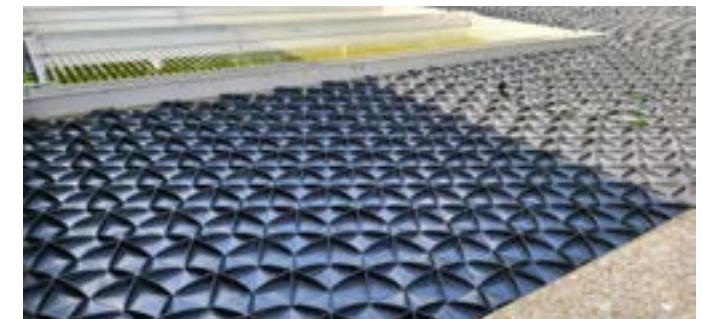
FIN-99250: CCD (counter current decantation)

France

F-01160: water tank
 F-03390: leachate
 F-03600: retention tank
 F-01150: chemicals
 F-01360: chemicals
 F-13117: chlorinated solvents
 F-13117: industrial wastewater
 F-13130: chemical tank
 F-13131: chemicals
 F-13773: 1.400 m² industrial wastewater
 F-17140: water tank
 F-17800: water tank
 F-22450: 6.000 m² water reservoir (Irrigation)
 F-26000: water storage tank
 F-26310: water tank
 F-26560: water storage facility

F-29: water tank (irrigation)
 F-29279: industrial wastewater
 F-30390: 1.000 m² industrial wastewater
 F-35500: water storage, irrigation
 F-36400: wastewater
 F-36600: 1.300 m² digestate basin
 F-37510: water Tank (irrigation)
 F-38150: chlorine
 F-38150: industrial wastewater
 F-38360: nitric acid
 F-38670: VOC reducing
 F-40800: industrial wastewater
 F-41700: industrial wastewater
 F-42163: industrial wastewater
 F-45: 1.200 m² water storage
 F-45250: water reservoir
 F-53602: chemical tank
 F-56140: industrial wastewater
 F-56607: chloric acid
 F-57500: 2 x retention tanks
 F-59152: water tank
 F-59279: 1.300 m² emergency tanks
 F-60190: retention tank
 F-60190: industrial wastewater
 F-60191: Retention tank
 F-60350: 2.100 m² industrial wastewater
 F-60350: industrial wastewater
 F-68390: industrial wastewater
 F-69191: chemicals
 F-69583: industrial wastewater

F-74156: retention tank
 F-75000: rainwater retention basin
 F-76200: industrial wastewater
 F-81: process water
 F-82700: 1.800 m² industrial wastewater
 F-85170: industrial wastewater
 F-93155: diesel tank (Hexa-Cover® Oil & Gas)
 F-93155: water storage (storm water)
 F-93155 : tater tank



Germany

D-031: leachate tank
 D-03249: water tank (Fire-fighting)
 D-06237: 2.300 m² emergency water tank
 D-06237: industrial wastewater
 D-06803: cooling water
 D-17087: wastewater
 D-17091: polluted surface water, compost. plant
 D-17389: 2 x 2.500 m² wastewater
 D-18519: polluted surface water
 D-19288: process water
 D-22113: leachate
 D-24539: water storage tank
 D-25524: industrial wastewater
 D-25572: leachate
 D-31275: process water
 D-32805: municipal wastewater
 D-35764: municipal WWTP
 D-38106: wastewater
 D-38106: wastewater tank (WWTP)
 D-38373: municipal leachate
 D-39418: process water
 D-47829: chemical tank
 D-50129: sewage treatment plant
 D-66115: process water
 D-69469: sewage treatment plant
 D-71334: water tank
 D-73497: process water
 D-84489: 1.200 m² process water

D-87787: industrial wastewater, brewery
 D-97421: municipal WWTP
 D-98634: industrial wastewater

Hamburg Port Authority, D-21159



"We are very satisfied with the Hexa-Cover® Floating Cover. The Hexa-Cover® serve their purpose to reduce the amount of light in the water and thus plant growth in the pond, very well"

M. Schadwinkel, Hamburg Port Authority

"At SKZ we installed the Hexa-Cover® Floating Cover in a 95° C test facility.

The development of moist, and the evaporation is reduced significantly"

SKZ-TeConA GmbH, D-97076:

BAUR Folien GmbH, D-87787



"Before installing the Hexa-Cover® our customer - a brewery - had many complaints from neighbors about the odor. After the installation the problem is solved"

Greece

GR-8648: wastewater seawater / oil mix)

Hungary

HU-2338: water storage facility
HU-2344: 5.000 m² industrial wastewater
HU-4300: 6.000 m² water reservoir

Iceland

Reykjavik: industrial wastewater

India

Gujarat 380024: industrial wastewater

Ireland

O'Neills Sportswear, Dublin
"We are very happy with the performance of the Hexa-Cover® Floating Cover, the odor problem has disappeared"



Listowel, Co. Kerry: Industrial wastewater
Mellow, County Cork: wastewater
Meath: 1.150 m² wastewater, brewery



Israel

3.500 m² water reservoir, irrigation
20.000 m² water reservoir, irrigation

Italy

I-24060: industrial wastewater
I-40128: 1.100 m² industrial wastewater
I-45011: water storage
I-51012: industrial wastewater
I-67063: industrial wastewater (Coca-Cola®)
I-95121: industrial wastewater, refinery

Japan

Hakata area: industrial wastewater
Tokyo area: industrial wastewater
Tokyo area: leachate

Jordan

Amman: 7.900 m² water storage facility

Kazakhstan

Aktogay: 4.000 m² PLS reservoir
Almaty: 1.650 m² PLS reservoir



Korea

Seoul: wastewater

KSA

1.100 m² wastewater ponds (60-90° VOC)

4.800 m² wastewater storage facility

4.350 m² water storage



Morocco

Casablanca: total of 9.000 m² leachate reservoirs

Netherlands

NL-4286: water tank

NL-6163: industrial wastewater

NL-6167: 10.600 m² industrial wastewater

NL-6170: 16.000 m² industrial wastewater

NL-6170: 9.000 m² industrial wastewater

NL-6171: 6.850 m² industrial wastewater

NL-9936: 1.000 m² industrial wastewater

"We are satisfied with the use of the Hexa-Cover® to cover up one of our proceswater bassins at the Chemelot site. The odor in the area has reduced drastically"



Mexico

104.000 m² Tailing Pond



Norway

N-4029: chemicals

N-5954 : wastewater / crude oil



South Africa

Durban area: 4.500 m2 industrial wastewater



New Zealand

Northland: 7.000 m² wastewater lagoon

South Island: 1.040 m² sewage treatment pond



Portugal

Alcanena: industrial wastewater

Aveiro: industrial wastewater

Portel: water tank (Irrigation)

Romania

Bucharest, Comuna Costinesti: wastewater

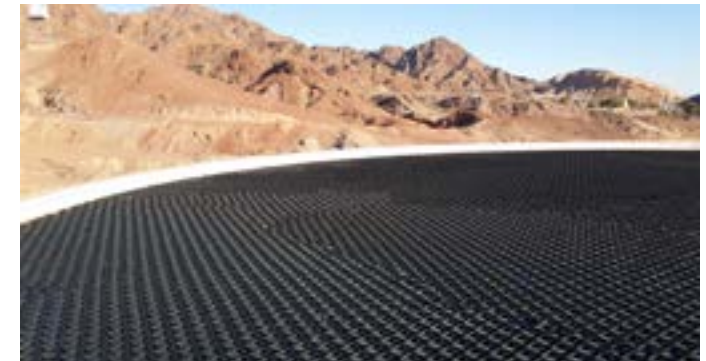
RO-07: industrial wastewater

RO-700669: SBR Tank

Slovak Republic

82412: process water

99128: industrial wastewater



Spain

Tecnoaliment, S.L., Pobla de Segur, Lleida

"We have a water storage facility of about 10.000 m³ located in La Pobla de Segur (Lleida). For obvious reasons, water evaporation is very important in this area because of the height above sea level. Therefore, we were looking for a solution to reduce this loss. As the water level in the reservoir varies a lot, the solution chosen would have to allow also to adapt to this.

Based on the above, we chose to cover the reservoir with the Hexa-Cover® Floating Cover as this solution offers all the required features we requested.

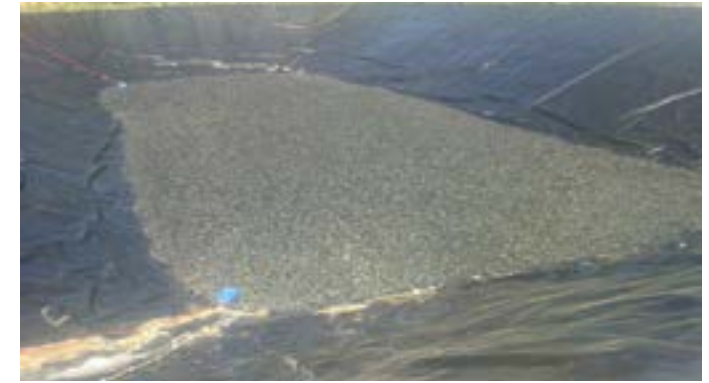
After the installation we have seen a significant reduction in evaporation of around 75-80% which represents an extra saving of water for us.

In addition, we have noticed a significant improvement in water quality as Hexa-Cover® Floating Cover also is very effective in stopping the growth of algae - there is simply no penetration of light into the water which means no growth of algae, what entails a significant increase in water quality. This improvement in water quality means a significant saving in chemicals to treat water and also an improvement in the supply without seals in the filters.

For all this, we can say that we have found the ideal solution. Indeed, the Hexa-Cover® Floating Cover is very effective, very easy to handle and does not require any additional service, maintenance or supervision.

Hexa-Cover® is highly recommended and represents a good long-term investment"

Joan Ramon Porta, Director



Atlas Gestión Medio Ambiental, S.A. (Barcelona, Spain) chose Hexa-Cover® to reduce the odor level in two leachate ponds from a hazardous waste controlled landfill

"To reduce odors, we chose the Hexa-Cover® floating cover for our 2 leachate ponds.

The main reasons for choosing Hexa-Cover® were its ability to reduce odors and that it is a solution that does not require permanent structures, and therefore minimizes the installation and maintenance costs associated with this type of roof.

Even the installation is very simple and simple, Hexa-Cover® is launched directly into the ponds and each of the elements are distributed and placed automatically creating a uniform cover.

Another important aspect is the automatic adaptation to any change in the liquid level.

We are very pleased with the choice of Hexa-Cover® Floating Cover"

Xavier Mundet , Director General



Spain

E-06220: cooling water
E-06170: water tank
E-06870: water tank
E-08184: water tank
E-08272: hazardous wastewater
E-23440: water tank (irrigation)
E-25242: water tank
E-25316: 2 x water tanks
E-25753: water tank
E-28300: WWTP (pharmaceutical industry)
E-28830: water tank (irrigation)
E-36006: 1.720 m² effluent lagoon
E-37420: 2.000 m² leachate pond
E-42005: water tank (irrigation)
E-42005: wastewater
E-43110: styrene tank
E-43439: water tank
E-43460: water tank
E-43460: Industrial wastewater
E-44580: water tank
E-48001: 1.700 m² leachate basin
E-49708: water tank
E-50290: water storage tank
E-61: Solar plant, water basin
E-68: Solar plant, water basin

Switzerland

CH-1860: water storage
CH-6287: water storage
CH-8353: water storage
CH-8552: water storage (irrigation)

Taiwan

Taipei: municipal WWTP

Thailand

Bangkok area: water tank

Turkey

54000 Adapazari/Sakarya: 6.100 m² industrial wastewater (sugar manufacturing)



UK

DA11: industrial water storage
DA11: 1.200 m² water storage reservoir
EH27: industrial wastewater
NG 33: industrial wastewater



USA

Alexandria, LA:
74,000 sqft / 6,875 m² wastewater reservoirs

Algona, IA: industrial wastewater
Bedford, IN: industrial wastewater
CA 95469: water storage facility
Canton, OH: industrial wastewater
Clarksburg, WV: 4,730 m² frac water tank
Cleveland, OH: industrial wastewater
CO: 5 x frac water tanks
Dakota, IL: industrial wastewater
Dallas, OR: water storage tank
Dallas, WV: 2,315 m² frac water tank
DeBuque, CO: 10,500 m² water Storage
Dickson County, TN: sedimentation tank
Emporia, KS: industrial wastewater
Francesville, IN: industrial wastewater
Gallatin, TN: municipal wastewater
Henderson, KY: industrial wastewater
Houston, TX: industrial wastewater

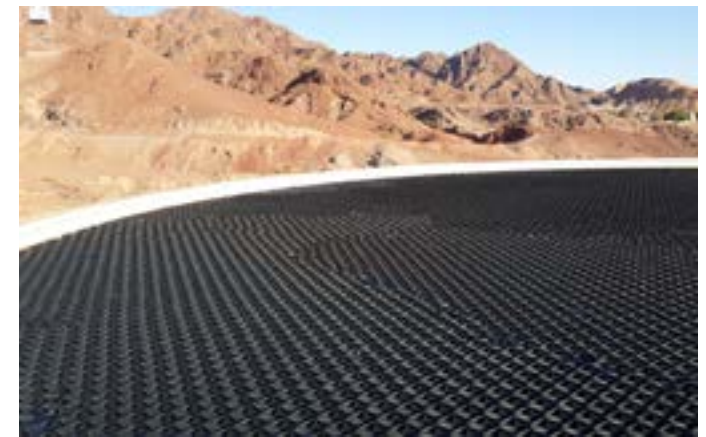
Green Bay, WI:
2,185 m² De-icing Storage Pond
(Austin Straubel International Airport)

Green River, WY: industrial wastewater
Jackson, OH: industrial wastewater

Kanab, UT: water tank (wildlife)
Laurel, MD: industrial wastewater
Lewis Run, PA: water storage facility



La Porte, TX: contaminated water
Mesa Verde, CA: water storage facility
Medaryville, IN: industrial wastewater
Milkford, OH: 1,950 m² wastewater reservoir
Monaca, PA: industrial wastewater
Monroe, WI: 1,235 m² equalization tank
Moorhead, MN: water storage facility
Pacheco, CA: 1,800 m² water reservoir
Port Arthur, Texas: water Storage Tank
Piketon, OH: water storage facility
Port Arthur, TX: water storage facility
Princeton 085300, NJ: water storage tank
Springfield, PA: water storage facility
Sonora, CA: wastewater
St. Croix, USVI: 32,300 sqft Storage Facility



Napa Berryessa Resort Improvement, Napa, CA

Napa Berryessa Resort Improvement, chose Hexa-Cover® Floating Cover for a wastewater application for controlling odor, algae and evaporation

Hexa-Cover® Floating Cover is installed at Lake Berryessa Wastewater Treatment plant, 1465 Steele Canyon Road, Napa. The application is to cover two concrete equalization basins.

Process:

Raw sewage from homes and resort, flow from gravity and lift stations into headwork's Lakeside Spiral Screen, screened water into two equalization basins with Hexa-Cover® Floating Cover, then to Ovivo MBR, to effluent basin or alternate overflow basin, then pumped to reservoir off site for land application.

Plant flow capacity approximately 30.000 GPD now and at build out 60.000 GPD.

"The visit to the plant was a bit amazing. There was no odor from the "Hexa-Covered" EQ Basins. These EQ basins have very high odor potential and algae potential because of the heavy nutrients coming off the screen. There was no algae, the discs as advertised interlocked, they floated up and down with no problem, and could not help but reduce evaporation.



A solid cover presented safety issues, the discs did not. Summit Engineers was going to put aeration in these basins but saw a sample of the Hexa-Cover® product, called references then recommended the Hexa-Cover® installation. It penciled out better than aeration. That was important to this design build project, which Western Water Constructors, Inc. did with Summit.

Adjacent to these equalization basins are the effluent basin and overflow basin. These two basins were covered with algae.

The point; the Hexa-Cover® Floating Cover eliminates algae!

As proof, side by side basins, same plant, same time, two "Hexa-Covered" basins without algae and two uncovered basins with heavy algae. Also, no odor from the EQ basins.

The discs arrived in large sacks. Installation was simple; they simply dumped the discs into the basins. Installation was less than an hour. Contrast that to an aeration system"

Austin Straubel International Airport

Green Bay, WI

2.185 m² Deicing Storage Pond

The Austin Straubel International Airport required a new cover for its open water storage pond, which is used for deicing and storm water retention.

Critical to the operation of the airport, the open water pond requires a cover to serve as a bird deterrent and to protect wildlife from the toxicity of glycol.

In addition, the glycol and other chemicals used in the airport maintenance generate strong odors which also need to be controlled.

The unique Hexa-Cover® offers unique features for odor control, algae control, evaporation control and heat retention. The patented design incorporates hexagonal discs constructed of 100% recycled polypropylene with interlocking edges and a buttressed profile that allows for self-leveling, adjustment and dispersion ensuring maximum surface area coverage in all conditions.

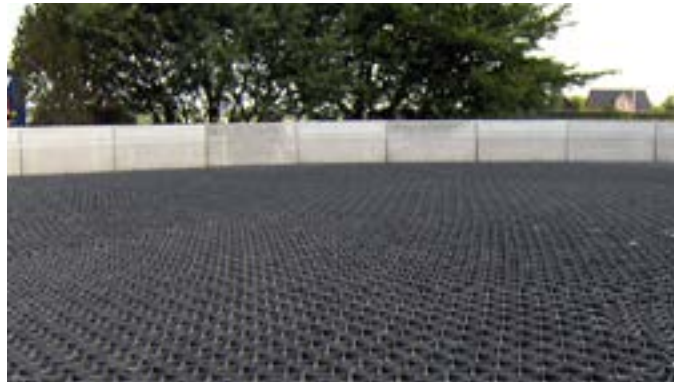
The cover was installed with minimal time, cost and equipment, providing almost instant coverage.



Installed in less than 4 hours, bags of discs were emptied into the basin and the cover immediately began serving as a bird deterrent, eliminating odors and keeping wildlife from coming in contact with potentially harmful de-icing fluids.

When the pond level fluctuates, the tiles lay on the pond slopes and bottom until the water level rises again.

What could have been a major problem is now a worryfree operation thanks to the Hexa-Cover® System.



For more information

Hexa-Cover A/S • Vilhelmsborgvej 5 • DK-7700 Thisted, Denmark • TEL +45 96 17 78 00
www.hexa-cover.com • info@hexa-cover.dk